

NOTE VIII.

ON A COLLECTION OF SNAKES FROM DEHLI.

BY

Dr. Th. W. van LIDTH de JEUDE.

(Plate 1).

During his stay in Laboean (Dehli, East-Sumatra) Dr. B. Hagen, to whom the Leyden Museum is indebted for large series of mammals, birds and insects, also collected a large number of snakes, the greater part of which were sent to our Museum. Dr. Hagen took a lively interest in snakes, and being convinced of the benefit a colonist might derive from the knowledge of the venomous snakes, living in his neighbourhood, he gave some years ago a description of those dangerous animals and their habits in the »Dehli-Courant''. As some of his statements were unknown to me and may perhaps be generally unknown, I shall take the liberty to mention these facts in this note, a newspaper as the Dehli-Courant being not likely to be consulted in matters of herpetology.

Afterwards the Leyden Museum was presented with a collection of snakes from Dehli by Mr. J. Chr. Prakke, who collected them in the neighbourhood of his plantation at Langkat.

The snakes of Dehli are now represented in the Leyden Museum by 43 species, and though only one species and one variety have till now been left undescribed, I thought it worth while to give a full list of the species represented in our Museum, as the occurrence of some of them as *Psammodynastes pictus* Gthr. and *Dryophis fasciolatus* Fi-

schcr indicate a relationship between the Fauna of Dehli and that of Borneo.

1. *Typhlina lineatus* Reinw.

One specimen from Laboean and another from Langkat.

2. *Cylindrophis rufa* Laur.

A great many specimens both from Laboean and from Langkat.

3. *Xenopeltis unicolor* Reinw.

Many specimens from both localities.

4. *Python reticulatus* Schneid.

Two specimens in Dr. Hagen's collection and one from Langkat.

5. *Calamaria vermiformis* D. & B., var. *sumatranus* mihi.

Two specimens of *Calamaria* in the collection of Dr. Hagen agree as to the pholidosis in all points with the description of *Calamaria vermiformis* given by Duméril and Bibron, but differ from it as to the coloration.

Both specimens have 5 upper-labials, the first pair of the lower ones do not form a suture but touch the chin-shield, whilst an azygos shield lies between the four chin-shields.

There is one foursided praecocular, the upper side of which has twice the length of the lower one. The scales are arranged in 13 rows; one specimen has 170 ventrals, one undivided anal and 19 pairs of caudals, the other has 165 ventrals, one undivided anal and 22 pairs of caudals.

As to the coloration both specimens differ from *Calamaria vermiformis* in having the upper parts brown with a bluish shine from the lips till the end of the tail, without any yellowish band or any spots. The four anterior upper-labials are brown also, only the 5th having a yellowish colour.

The lower part of the head and the 6 to 8 anterior ventrals are yellow.

The two outer rows of scales are for the greater part yellow, thus forming a yellow line which begins at the third series of scales and runs till the extremity of the tail. The belly from the 6th or 8th ventral is of a dusky-brown colour, with irregular yellowish spots. These spots never touch the yellow line, which runs along the sides of the belly, but are always surrounded by the dusky-brown colour.

In the largest of the two specimens these yellow spots are very small and few in number behind the middle of the body and on the tail.

As I have no specimens of *C. vermiformis* for comparison, I could only compare my specimens with the description given by Duméril and Bibron in their »Histoire des Reptiles» and with Jan's figures in his »Iconographie générale des Ophidiens», livraison 10, planche 2, fig 3. As these figures were made from a specimen in the Museum at Paris (probably one of the typical specimens), I think the difference in coloration between my specimens from Dehli and the type considerable enough to believe my specimens to belong to a peculiar variety.

6. *Simotes octolineatus* Schneid.

Several specimens from Laboean.

7. *Diadophis baliodeirus* Boie.

Three specimens in Dr. Hagen's collection.

8. *Elaphis melanurus* Schl.

A great many specimens were found in both collections.

9. *Coryphodon korros* Reinw.

According to Dr. Hagen this species is very common at Dehli. We got only one specimen from Laboean.

10. *Tropidonotus trianguligerus* Schl.

Four specimens in Dr. Hagen's collection.

11. *Amphiesma rhodomelas* Schl.

Two specimens from Laboean.

12. *Amphiesma chrysargos* Boie.

One specimen in Dr. Hagen's collection.

13. *Amphiesma flaviceps* D. & B.

Five specimens from Laboean and Langkat have all one praeocular and three postoculars, except one specimen with four postoculars, and eight upper labials. The reddish band behind the black ring round the neck occupies in one specimen six rows of scales, in two others only five, and in the last two specimens it is as broad as four rows. Especially the colour of the head is darker than in Jan's figure ¹⁾, and the white cross-bands along the sides of the tail are clearly visible.

14. *Homalopsis buccatus* L.

Three specimens from Laboean, two from Langkat.

15. *Homalopsis boaeformis* Schneid.

One specimen in Dr. Hagen's collection.

16. *Hypsirhina plumbea* Boie.

One specimen in Dr. Hagen's collection.

17. *Hypsirhina Hageni*, nov. spec.

Head rather long, scarcely distinct from neck; body and tail short and stout. Scales polished, in 27 rows, those on the middle of the back hexagonal, more long than broad, those on the flanks lozenge-shaped, equally broad and long

1) Jan, Iconographie générale des Ophidiens, livraison 29, pl. 3, fig. 1.

or broader. Our single specimen has 141 ventrals, a divided anal and 28 pairs of caudals.

Anterior frontals very small, smaller than one of the postoculars, vertical elongate, supraciliaries nearly as long as the vertical. Two postoculars, one praeocular very high, reaching the vertical with its upper angle. Loreal large, bordered by the praeocular, the posterior frontal and four or five upper-labials. Nasal pentagonal, with the nasal opening nearly in the middle and a groove running from the neighbourhood of that opening towards the side bordered by the first upper-labial.

Upper-labials high, the first four or five undivided, the hinder ones divided into two or three by transverse sutures. There is a longitudinal groove between the upper labials and the shields above them. Along the cleft of the mouth there are nine upper-labials on the right side, and ten on the left. Twelve lower-labials are present on each side, the anterior two of each side meeting those of the other side behind the mental, the posterior ones are divided into two shields by a longitudinal groove. Three pairs of chin-shields, the anterior very large and broad, resembling those of *Hypsirhina Bocourti* Jan ¹). The following pair small, the last pair nearly resembling ordinary scales. The lower pairs of chin-shields do not reach one another but are separated by seven scales.

Upper parts blackish brown with narrow stripes of a yellow colour ascending along the sides and reaching the middle of the back, mostly not joining those of the other side but alternatively arranged. Posterior upper-labials yellow. The three outer series of scales yellow with some small dark spots detached from the dark upper parts; belly and under part of the head yellow, except the mental and the six anterior labials which are brownish, under part of the tail yellow with the margins of the subcaudals dark, these dark margins forming a zig-zag line along the middle of the tail.

1) Jan, l. c., livraison 26, pl. 5, fig. 2.

The single specimen of this species which I dedicate to Dr. B. Hagen, shows asymmetry in the arrangement of the upper- and lower-labials. It was caught at Laboean.

18. *Liopeltis tricolor* Schl.

One specimen in Dr. Hagen's collection.

19. *Gonyosoma oxycephalum* Reinw.

Four specimens in Dr. Hagen's, one in Mr. Prakke's collection.

20. *Leptophis formosus* Schl.

One specimen in Dr. Hagen's collection, without any black stripes along the sides. The black band from the tip of the snout through and behind the eye runs on to on the body.

21. *Dendrophis pictus* Boie.

Many specimens in both collections.

22. *Dendrophis octolineatus* D. & B.

Two specimens from Laboean, one from Langkat.

23. *Chrysopelea ornata* Shaw.

One specimen in Dr. Hagen's collection belonging to var. γ Günther¹⁾ has the hind margins of the ventral-shields black. The other specimens from Laboean and Langkat belong to Günther's var. ϵ . Dr. P. Bleeker considered this variety as a distinct species and called it *C. Hasseltii*, as is stated by Dr. Günther l. c. and may be seen in several specimens now in the Leyden Museum, formerly in Dr. Bleeker's collection. As far as I know Dr. Bleeker never gave a description of his new species.

24. *Dryophis prasinus* Wagl.

A great many specimens of this common snake were collected by Dr. Hagen.

1) Dr. A. Günther, Reptiles of British India, p. 299.

25. *Dryophis fasciolatus* Fischer.

Three specimens of this species from Borneo, described by Dr. J. G. Fischer ¹⁾, were collected by Dr. Hagen in Laboean. They agree in all points with Fischer's description.

26. *Psammodynastes pulverulentus* Boie.

Three specimens in Dr. Hagen's collection.

27. *Psammodynastes pictus* Gthr.

It may be noticed as a curious fact, that in Dehli both species of the genus *Psammodynastes* are found side by side. Dr. M. Mocquard in his »Seconde contribution à l'histoire du genre *Psammodynastes*» ²⁾ remarks that as *Ps. pictus* was found both in Borneo and in the isle of Biliton, it would be a surprising fact, if it did not occur in Sumatra, Java and the surrounding islands. Now, with Dr. O. Boettger's statement of its occurrence in Indrapura (S. W. Sumatra) ³⁾, and the fact of its being found in Dehli, *Ps. pictus* may justly be regarded as an inhabitant of the large isle of Sumatra. The occurrence of the two species side by side in Dehli upsets Dr. Fischer's theory according to which *Ps. pictus* is to be regarded as a local variety of *Ps. pulverulentus* ⁴⁾. In my opinion there can exist little doubt about the specific difference between these two forms. They may be distinguished even at a distance without counting or comparing shields or scales. The head of *Ps. pulverulentus* has a broad trigonal form and the sides of the snout with the lips descend in a nearly perpendicular position without any remarkable curves, and so form a clearly marked *canthus rostralis*.

1) Dr. J. G. Fischer. Ueber eine Kollektion von Amphibien und Reptilien aus S. O. Borneo. Arch. f. Naturgesch. 1885. p. 66.

2) Extrait du Bulletin de la Société Philomatique de Paris. Séance du 12 Mai 1888.

3) Bericht über die Senckenbergische Naturf. Ges. zu Frankfurt a/M. 1886/87. p. 46.

4) Dr. J. G. Fischer. l. c. Arch. f. Naturgesch. 1885.

In *Ps. pictus* the head has an oblong form and the lips are bent outwards and extend, when seen from above, far beyond the width of the posterior frontals, in this manner there is formed a longitudinal concavity along the snout just above the labials; the *canthus rostralis* is not so clearly visible as in *Ps. pulverulentus*. The anterior frontals are much longer than in *Ps. pulverulentus*. The distance from the tip of the snout to the end of the vertical in *Ps. pulverulentus* equals the distance between the outer sides of the supraciliaries, in *Ps. pictus* it by far exceeds that distance and even the width of the head anywhere.

From the three Dehli specimens one was captured at Langkat, the others are from Laboean. One of these has two postoculars on each side, the other two have three postoculars. In all three the first and the third lower labial of one side meet those of the other side without chin-shields between them. This character seems to be a very constant one.

As to the coloration, the specimen from Langkat has a brown colour, without the darker band along the back but with indications of the light spots. The two specimens in Dr. Hagen's collection are of a grayish colour with a broad dark band along the back and light spots put alternatively. They all have a dark stripe from the tip of the snout through and behind the eye, in one of the grayish specimens this stripe or line extends along the neck on the sides of the body and runs with some interruptions as far as the beginning of the tail.

In the Leyden Museum there are four specimens from Borneo, two of them of a brownish, the others of a grayish colour; one of them shows a whitish line along the *canthus rostralis* above the dark line, extending along a part of the trunk. One of these specimens has only two postoculars on each side. No chin-shields between the first and third lower labials of both sides, in any of the four specimens.

28. *Lycodon aulicum* L.

One specimen in Dr. Hagen's collection.

29. *Odontomus subannulatus* Schl.

One specimen was captured in Laboean.

30. *Ophites subcinctus* Boie.

Two specimens in Dr. Hagen's collection.

31. *Leptognathus laevis* Boie.

Three specimens from Laboean; with one of them the anterior large shields on the middle-line are found to be of a white colour, whilst farther up many series of dark coloured scales are placed alternatively with as many series of white ones.

32. *Dipsas drapiezi* Boie.

Two specimens in Dr. Hagen's collection.

33. *Dipsas dendrophila* Reinw.

Represented by one specimen in both collections.

34. *Elaps furcatus* Schneid.

Three specimens in Dr. Hagen's collection.

35. *Elaps bivirgatus* Schl.

One specimen from Laboean. — Dr. Hagen describes in his article on the venomous snakes of Dehli (already quoted) a third species of the genus *Elaps* having a red belly and a black coloured back. Along the middle of the back runs a black line, and each flank is provided with three white-coloured longitudinal stripes. As none of our specimens agree with this description, I cannot make out which species Dr. Hagen had in view; perhaps it was *Elaps tetrataenia* Bleeker.

36. *Bungarus annularis* Schl.

One specimen of this very dangerous snake was found in Mr. Prakke's collection. According to Dr. Hagen this snake is very common in Dehli, often reaches a length of six feet and is generally seen in swampy countries some time before sunrise or after sunset.

37. *Ophiophagus elaps* Schl.

One very young specimen from Langkat. Dr. Hagen captured specimens of ten and eleven feet and maintains that this most dangerous of all Dehli snakes is very swift in its movements and of such an angry mood that it attacks people at the slightest disturbance and sometimes even without any evident reason.

38. *Naja tripudians* Merr.

The local variety of this species in Dehli is of a dark-brown or sometimes black colour, with two black oval spots surrounded with white on the sides of the neck, but without the curved line that unites these spots across the back in the typical specimens of the continent. Dr. Hagen maintains this snake to be an animal with nocturnal habits, as it is seldom seen in the daytime. It is very slow in its movements and hardly ever stirs to go out of the way when met with in the dark. It can spit its saliva (?) to a distance of two or three feet and aims at the eyes of the intruder.

39. *Bothrops gramineus* Shaw.

One specimen in Mr. Prakke's collection. Dr. Hagen considers the species of the genus *Bothrops*, though provided with large fangs, as less dangerous than *Bungarus annularis*.

40. *Bothrops erythrurus* Cantor.

Some specimens in Dr. Hagen's collection.

41. *Bothrops Wagleri* Boie.

This snake seems to be one of the most common vipers of Sumatra, as we never got a collection without it. In the Malay language it is called »Ular nanti bulan'', as the aborigines maintain that it stays at the same place for a month before it seeks another hiding-place. Dr. Hagen knows for certain that one specimen was seen on the same trunk for weeks together, until one of the doctor's friends slew it and took it home.

42. *Bothrops Hageni* v. L. d. J.

This species is represented in Mr. Prakke's collection by one specimen. According to Dr. Hagen (who does not believe it to be a young specimen of *Bothrops sumatranus* Raffles as suggested by me ¹⁾), but is convinced that it is a proper species) this snake attains a length of three feet, is of a grass-green colour on the back, somewhat lighter on the sides with some blue spots, not very clearly visible against the surrounding green.

43. *Platurus Fischeri* Jan.

The only specimen in Dr. Hagen's collection was captured in the forests of Serdang at a distance of nearly a day's journey from the sea.

Leyden Museum, 30 December 1889.

1) Notes from the Leyden Museum. Vol. VIII. p. 43.